## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-9. (Cancelled)

10. (Original) A method for electromagnetic tracking, said method comprising:

selecting a tracker configuration for components in an electromagnetic tracker;

generating a processing scheme for the tracker configuration; and

applying the processing scheme to the components in the electromagnetic tracker.

11. (Original) The method of claim 10, wherein said generating step further comprises generating a processing scheme on demand.

12. (Original) The method of claim 10, wherein said generating step further comprises generating a processing scheme for the tracker configuration using software.

13. (Original) The method of claim 10, wherein said generating step further comprises generating a processing scheme for the tracker configuration using a configurable processor.

14. (Original) The method of claim 10, further comprising storing the processing scheme in memory.

15. (Original) The method of claim 10, further comprising determining at least one of a position and an orientation of at least one component in the electromagnetic tracker.

16. (Original) A configurable electromagnetic tracking system, said system comprising:

at least one of a transmitter and a receiver for measuring a position in a coordinate system;

tracker electronics for determining position of said at least one of a transmitter and a receiver using information from said at least one of a transmitter and a receiver, said tracker electronics configurable for a plurality of tracking system architectures.

17. (Original) The system of claim 16, wherein said tracker electronics generates a processing scheme for a tracking system architecture.

18. (Original) The system of claim 16, wherein said tracker electronics simultaneously supports a plurality of tracking system architectures.

19. (Original) The system of claim 16, wherein said tracker electronics comprise modular, configurable tracker electronics.

20. (Original) The system of claim 16, wherein said tracker electronics uses software to generate support for said plurality of tracking system architectures.

21. (New) The system of claim 16, wherein said tracker electronics are configured by software to accommodate the plurality of tracking system architectures.

22. (New) The system of claim 16, wherein said tracker electronics store waveforms in memory for said plurality of tracking system architectures.

23. (New) The system of claim 16, wherein said tracker electronics generate waveforms on demand for at least one of said plurality of tracking system architectures.

24. (New) The system of claim 16, wherein said tracker electronics store software in memory for said plurality of tracking system architectures.

25. (New) The system of claim 16, wherein said tracker electronics generate software code on demand for at least one of said plurality of tracking system architectures.

26. (New) The system of claim 16, wherein the system includes both a transmitter and a receiver, and wherein the tracker electronics determine at least one of a position and an orientation of the receiver using information from the transmitter.

27. (New) The system of claim 16, wherein the system includes both a transmitter and a receiver, and wherein the tracker electronics determine at least one of a position and an orientation of the transmitter using information from the receiver.